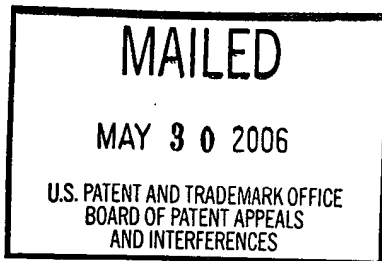


The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES



Ex parte JASON T. CASSEZZA

Appeal No. 2006-1374  
Application No. 09/409,330

ON BRIEF

Before THOMAS, LEVY, and MacDONALD, Administrative Patent Judges.  
LEVY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 27-38, which are all of the claims pending in this application.

We AFFIRM-IN-PART.

BACKGROUND

The appellant's invention relates to controlling audio volume in processor-based systems (specification, page 1). Claim 27 is representative of the invention, and is reproduced as follows:

27. A method of controlling volume levels in a processor-based system comprising:

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automatically generating a plurality of sounds of progressively changing volume;

receiving a user selection of a desired volume level; and

using said user selection to control the volume of sounds generated by said processor-based system.

The prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Lee	5,191,620	Mar. 2, 1993
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Claims 27-38 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Lee.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejection, we make reference to the answer (mailed October 14, 2005) for the examiner's complete reasoning in support of the rejection, and to the brief (filed July 25, 2005) and reply brief (filed December 5, 2005) for the appellant's arguments thereagainst.

Only those arguments actually made by appellant have been considered in this decision. Arguments which appellant could have made but chose not to make in the brief have not been considered. See 37 CFR § 41.37(c)(1)(vii)(eff. Sept. 13, 2004).

OPINION

In reaching our decision in this appeal, we have carefully considered the subject matter on appeal, the rejection advanced by the examiner, and the evidence of anticipation relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, appellant's arguments set forth in the briefs along with the examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

Upon consideration of the record before us, we make the determinations which follow. We begin with claim 27. To support a rejection of a claim under 35 U.S.C. § 102(b), it must be shown that each element of the claim is found, either expressly described or under principles of inherency, in a single prior art reference. See Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

The examiner's position can be found on pages 3 and 4 of the answer. Appellant's position (brief, page 11) is that the portions of Lee relied upon by the examiner for a teaching that Lee discloses "automatically generating a plurality of sounds of progressively changing/increasing volume" can not possibly be

interpreted to support the rejection, and have nothing to do with generation of sounds of progressively changing/increasing volume.

We note at the outset that claim 1 does not recite that the sound is increasing in volume, but rather that the sounds progressively change volume.

From our review of Lee (col. 3, lines 1-10) we find that:

[T]he MICOM 3 initializes the set for the OSD<sup>1</sup> mode to control the volume level of sound. The key-check step 10 check either existence or nonexistence of the key-input transmitted from the transmitter 1 or key-matrix 2 and the input discrimination step 11 checks whether the input signal is an up-signal or a down signal. Then, if the key-input signal is an up-signal, the PWM pulse output, and the set control signal, are increased as long as the up-signal is applied and the bars of the OSD part 5 are increased at the same time.

From this disclosure we find that the set control signal is increased as long as the up-signal is applied. The up-signal is applied by the key input of a transmitter 1 (col. 2, lines 18-20). If the up-signal is not applied continuously, the increment of the pulse width modulation (PWM) and the bars is stopped (col. 3, lines 11-13). Thus, upon holding down a key on the transmitter to indicate an up-signal or a down-signal, the received signal at the microcomputer (MICOM) will cause

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<sup>1</sup>On screen display.

continuous incrementing of the PWM and the bars. From the use of the transitional phrase "comprising" in claim 27, we find that the claim does not preclude the manual holding down of a button on the transmitter causing an automatic generating of a signal that will increase or decrease the bars shown in figure 3A and 3A'. That is, once a user holds down an up-signal or down-signal button, the system will automatically increment the PWM and the bars.

The issue becomes whether the automatic generating of an increase or decrease of the bars will produce an increase or decrease of the volume. Appellant's position (reply brief, page 1) is that the reference never suggests how or when sound is actually generated, and that the PWM signals control the display and not the generation of sound. Appellant argues (reply brief, page 2) that there is reason to believe that no sound is produced until the volume level is set, and adds (id.) that "In other words, until the volume level is set by picking a displayed level, no volume is produced. This is consistent with the whole intent of the reference to provide a very accurate display which accurately displays the center volume level, the lower volume level, and the upper volume level in a proportional way."

for controlling the volume level of sound for a display (col. 1, lines 1 and 2). The reference discloses that it is known in TV systems to use PWM to control the volume of sound (col. 1, lines 14-18). To achieve the object of the invention of controlling the volume of sound, the invention uses an input discrimination, an increment routine, a decrement routine and a state display routine (col. 1, lines 34-56). From the disclosure of having a transmitter 1, computer 3, display 5 and using PWM to control volume levels in a TV, we find that an artisan reading the disclosure of Lee would understand that the volume of sound is increased or decreased as the up or down signals are used on the transmitter. We find this to be supported by the disclosure of the bars of figures 3A and 3A' which represent increasing or decreasing volume levels. In our view, an artisan would not select an upper or lower volume level based upon looking at the number of bars on the display in a vacuum, but would base their decision selecting upper and lower volume levels upon hearing the sounds before making a selection. Thus, although Lee does not specifically describe increasing or decreasing volume in response to the depressing of the up or down signals, we find that this is inherent in the reference, as it necessarily flows from the reference that an artisan will need to hear the volume level in

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order to select upper and lower volume levels. From all of the above, we find that Lee anticipates the language of claim 27. The rejection of claim 27 under 35 U.S.C. § 102(b) is affirmed, along with the rejection of claims 28-30, dependent therefrom, which have not been separately argued by appellant.

We turn next to independent claim 31. We shall sustain the rejection of claim 31 for the same reasons as we affirmed the rejection of claim 27. The rejection of claim 31, along with claims 32-34, dependent therefrom, which have not been separately argued by appellant.

We turn next to independent claim 35. We cannot sustain the rejection of claim 35, as well as claims 36-38, dependent therefrom, because Lee does not describe the remote control transmitter to receive sound generated by the sound generating circuit. The rejection of claims 35-38 under 35 U.S.C. § 102(b) is reversed.

#### OBSERVATIONS AND REMARKS

We observe that claims 27 and 30 are broad enough to be met by an individual adjusting the remote control on their television while viewing a television show where the sound level progressively changes volume. However, in view of our affirmance

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of the rejection of these claims, we decline to add a new ground of rejection.

## CONCLUSION

To summarize, the decision of the examiner to reject claims 27-34 under 35 U.S.C. § 102(b) is affirmed. The decision of the examiner to reject claims 35-38 under 35 U.S.C. § 102(b) is reversed. No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

JAMES D. THOMAS  
Administrative Patent Judge

STUART S. LEVY  
Administrative Patent Judge

ALLEN R. MacDONALD  
Administrative Patent Judge

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